FORECASTING INTERNATIONAL TOURISM DEMAND IN BALI

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ABSTRACT
In this paper Seasonal Autoregressive Integrated Moving Average (SARIMA), Multi Layer Perceptron-Neural Network (MLP-NN) and Extreme Learning Machine (ELM) models and their usefulness was investigated in forecasting tourism. The aim of the study is to compare and select appropriate forecasting model for international tourism demand particularly in Bali-Indonesia. The forecasting accuracy of the SARIMA, MLP-NN, ELM models are calculated and compared using criteria like RMSE, MAE, MAPE and MASE. It is found that, MLP-NN is the best model for forecasting tourist arrivals.

KEYWORDS: Multi Layer Perceptron-Neural Network (MLP-NN), Extreme Learning Machine (ELM), Seasonal Autoregressive Integrated Moving Average (SARIMA), RMSE, MAE, MAPE, MASE.

REFERENCES


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